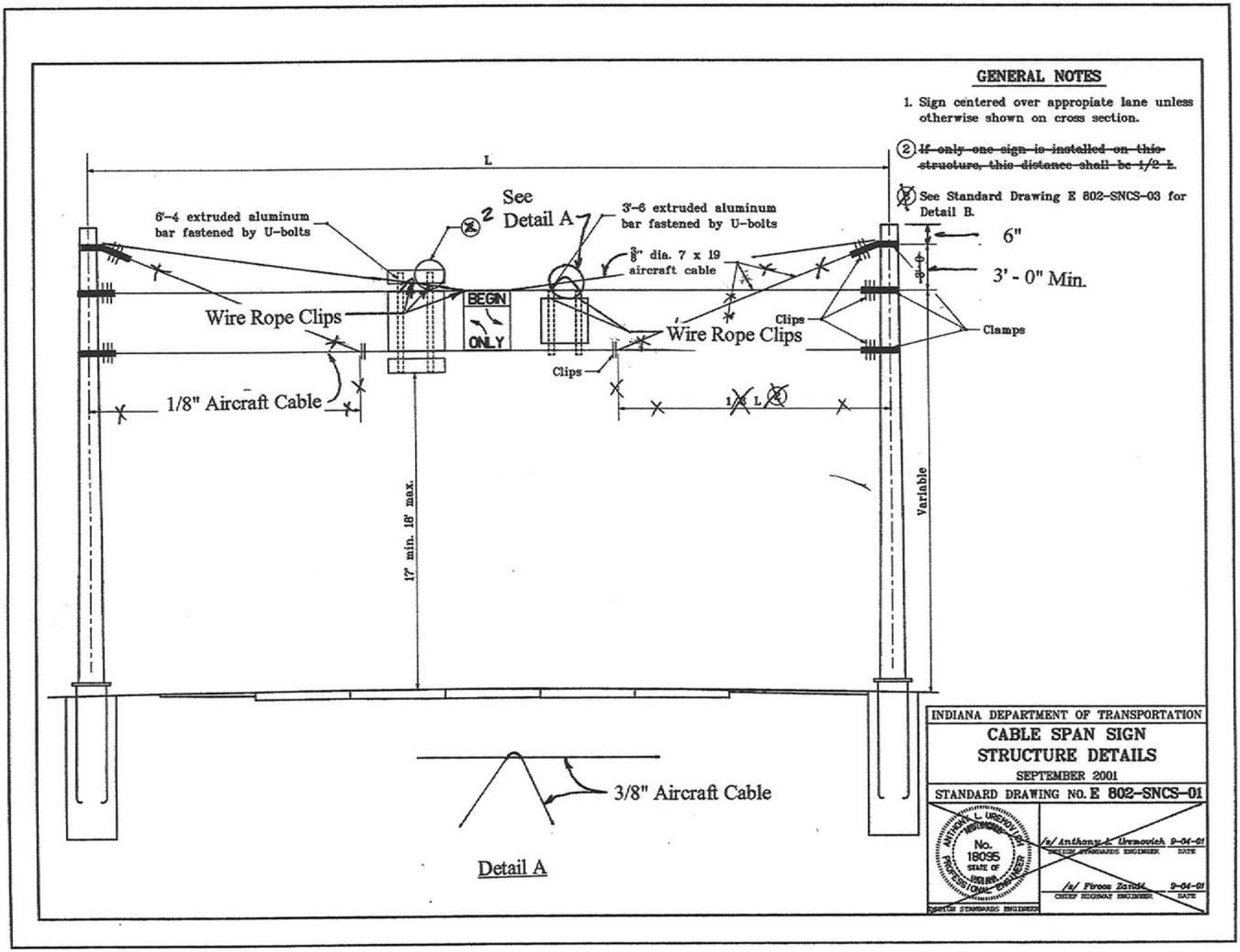
Item No. 45-6
Mr. Poturalski
Date: 2/19/04

PROPOSED NEW STANDARD DRAWINGS

802-SNCS-01, Cable Span Sign Structure Details

The intent of this proposal is to solve the sagging and buckling problem we are seeing in our overhead cable spans. This change would make them identical to our signal plan standard.

Other sections containing specific cross references: None	General Instructions to Field Employees Update Required? Y___ N___ By - Addition or Revision Frequency Manual Update Required? Y____ N____ By – Addition or Revision
Recurring Special Provisions potentially affected: None	Standard Sheets potentially affected: See Above
Motion: Mr. Second: Mr. Ayes: Nays:	Action: Passed as submitted; revised Effective - _____ Letting _____ Supplementals Withdrawn. Resubmit? _____ Received FHWA Approval? ____


GENERAL NOTES
1. Sign centered over appropiate lane unless otherwise shown on cross section.
2 If only one sign is installed on this structure, this distance shall be 1/2 L.
2 See Standard Drawing E 802-SNCS-03 for Detail B.
L
6'-4 extruded aluminum bar fastened by U-bolts
2
See Detail A
3'-6 extruded aluminum bar fastened by U-bolts
3/8" dia. 7 x 19 aircraft cable
6"
3' - 0" Min.
BEGIN
ONLY
Wire Rope Clips
Clips
Wire Rope Clips
Clamps
Clips
1/8" Aircraft Cable
1/8 L
17' min. 18' max.
Variable
3/8" Aircraft Cable
Detail A
INDIANA DEPARTMENT OF TRANSPORTATION
CABLE SPAN SIGN STRUCTURE DETAILS
SEPTEMBER 2001
STANDARD DRAWING NO. E 802-SNCS-01
ANTHONY L. URKOVICH
No. 18095
STATE OF INDIANA
PROFESSIONAL ENGINEER
/s/ Anthony L. Urkovich 9-04-01
DESIGN STANDARDS ENGINEER DATE
/s/ Firoz Zaidi 9-04-01
CHIEF HIGHWAY ENGINEER DATE
DESIGN STANDARDS ENGINEER

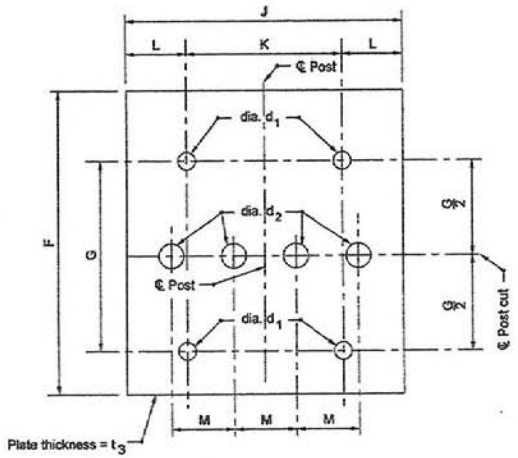
Item No. 45-7
Mr. Poturalski
Date: 2/19/04

PROPOSED NEW STANDARD DRAWINGS

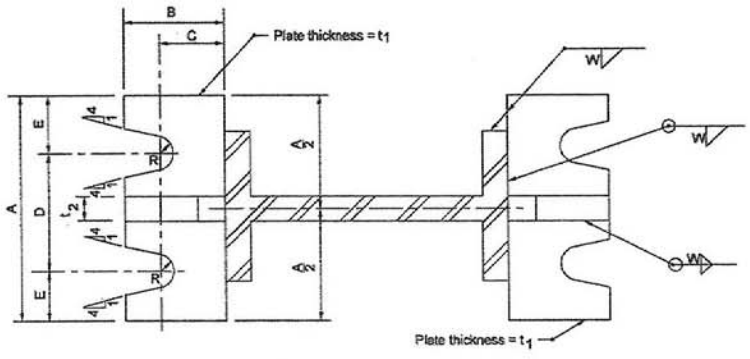
802-SNGP-04, Sign Details

The proposed change was overlooked on a previous set of standard changes dealing with panel sign installation. Due to previously approved changes, the clipped washer is no longer needed. Standard washers are now appropriate.

Other sections containing specific cross references: None	General Instructions to Field Employees Update Required? Y___ N___ By - Addition or Revision Frequency Manual Update Required? Y____ N____ By – Addition or Revision
Recurring Special Provisions potentially affected: None	Standard Sheets potentially affected: See Above
Motion: Mr. Second: Mr. Ayes: Nays:	Action: Passed as submitted; revised Effective - _____ Letting _____ Supplementals Withdrawn. Resubmit? _____ Received FHWA Approval? ____



PERFORATED FUSE PLATE DETAIL ③



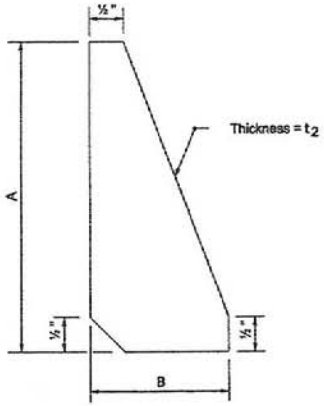
BASE PLATE DETAIL

Notes:

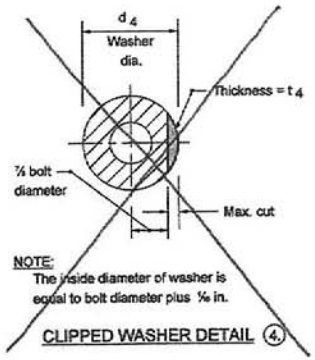
1. See table on Standard Drawing E 802-SNGP-05 for diminsions and weight of stiffener plate and base plate.
2. See table on Standard Drawing E 802-SNGP-06 for dimensions and weight of preforated fuse plate.
3. Use H.S. bolts with hex head, & hex nut, one flat washer under each bolt head and beveled or flat washer (where required) under nut.
4. For dimensions of clipped washer, see table 1, Manual of Steel Construction, AISC 8th Edition, specification for ASTM A325 and A490 Bolts.
5. Dimensional tolerances excluding the thickness for shims is ± 1/32".

Delete

SHIM DETAIL						
BOLT DIAMETER	L	W	N	R	S	X
½" to ¾"	1¾"	1¾"	15/32"	13/32"	1⅜"	15/32"
1"	2"	2"	⅜"	⅝"	1½"	15/32"

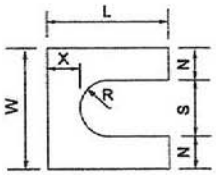


STIFFENER PLATE DETAIL



NOTE:
The inside diameter of washer is equal to bolt diameter plus ⅛ in.

CLIPPED WASHER DETAIL ④



Furnish 2-0.30 ± thick and 2-0.8 ± thick shims per post.

SHIM DETAIL

INDIANA DEPARTMENT OF TRANSPORTATION

SIGN DETAILS

MARCH 2004

STANDARD DRAWING NO. E 802-SNGP-04

RICHARD L. VanLEAVE REGISTERED No. 9750 STATE OF INDIANA PROFESSIONAL ENGINEER

DESIGN STANDARDS ENGINEER

/s/ Richard L VanLeave — DESIGN STANDARDS ENGINEER — 3-01-04 DATE

/s/ Richard K Shriner — CHIEF HIGHWAY ENGINEER — 3-01-04 DATE

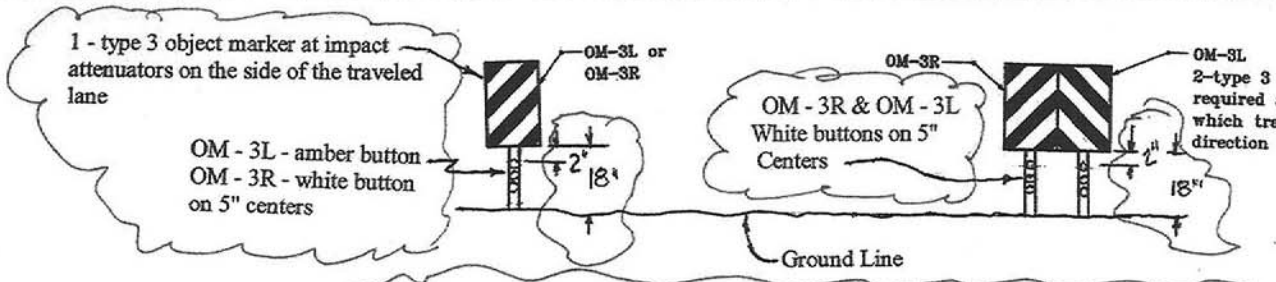
Item No. 45-8
Mr. Poturalski
Date: 2/19/04

PROPOSED NEW STANDARD DRAWINGS

808-MKNB-03, Placement of Traffic Control Devices

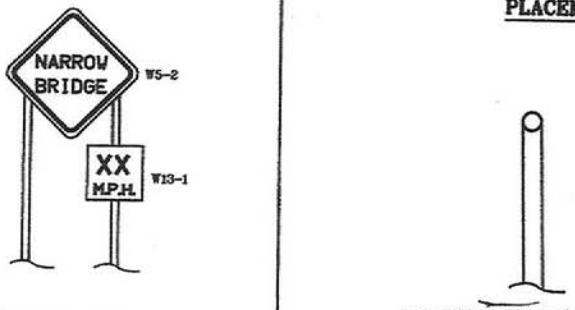
The proposed changes attempt to clarify existing drawings and allow for the use of object markers integral with approved impact attenuators to be used in lieu of separately installed type 3 object markers (which in practice, is already being done in many cases).

Other sections containing specific cross references: None	General Instructions to Field Employees Update Required? Y___ N___ By - Addition or Revision Frequency Manual Update Required? Y____ N____ By – Addition or Revision
Recurring Special Provisions potentially affected: None	Standard Sheets potentially affected: See Above
Motion: Mr. Second: Mr. Ayes: Nays:	Action: Passed as submitted; revised Effective - _____ Letting _____ Supplementals Withdrawn. Resubmit? _____ Received FHWA Approval? _____

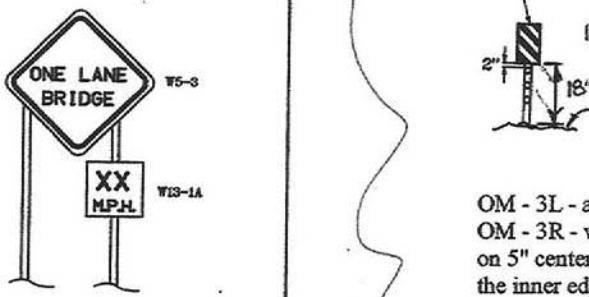


NOTE: OM's, on approved impact attenuators, that have been applied by the manufacturer are allowed in lieu of above OMs.

TYPE 3 OBJECT MARKERS
PLACEMENT AT GUARDRAIL END TREATMENTS
AND IMPACT ATTENUATORS

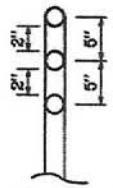


SIGNAGE REQUIRED AT NARROW BRIDGE ON TWO LANE ROADWAY

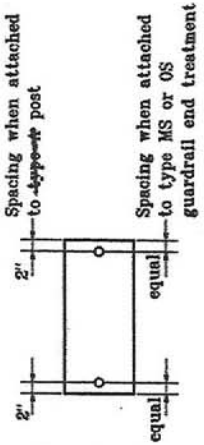


SIGNAGE REQUIRED AT ONE LANE BRIDGE ON TWO LANE ROADWAY

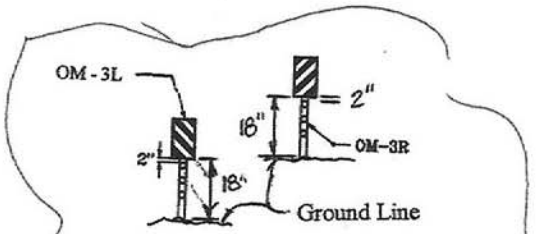
D-1 delineator post with one 3 in. dia. white delineator



D-3 delineator post with three 3 in. dia. white delineators



BOLT SPACING



OM - 3L - amber button
OM - 3R - white button
on 5" centers and inline with
the inner edge of the obstruction

TYPE 3 OBJECT MARKER
PLACEMENT AT ONE-LANE OR NARROW
BRIDGE ON TWO LANE ROADWAY

INDIANA DEPARTMENT OF TRANSPORTATION

PLACEMENT OF TRAFFIC CONTROL DEVICES

SEPTEMBER 1999

STANDARD DRAWING NoE 808-MKNB-03

DETAILS PLACED IN THIS FORMAT 7-27-99

ANTHONY L. URSENOVICH — No. 18095 — STATE OF INDIANA — PROFESSIONAL ENGINEER

/s/ Anthony L. Ursenovich 7-27-99
DESIGN STANDARDS ENGINEER — DATE

/s/ Pirooz Salehi 7-27-99
CHIEF HIGHWAY ENGINEER — DATE

DESIGN STANDARDS ENGINEER — ORIGINALLY APPROVED 9-24-99

Item No. 45-9
Mr. Poturalski
Date: 2/19/04

REVISION TO 1999 STANDARD SPECIFICATIONS

SECTION 801, BEGIN LINE 351, DELETE AND INSERT AS FOLLOWS:

(d) Delineation. *Temporary concrete barriers used to separate two-way traffic shall be delineated with top mounted temporary barrier delineators and with side mounted delineators. The top mounted delineators shall be two-sided, shall be yellow, and shall be placed on ~~each~~ every other section of barrier wall (±3 m or 10 ft spacing). The top mounted delineators shall be mounted perpendicular to the direction of traffic flow. The side mounted delineators shall be yellow and shall be mounted in accordance with 602.03(f).*

Temporary concrete barriers in locations other than separating two-way traffic shall be delineated with either type C construction warning lights or top mounted temporary barrier delineators and with side mounted barrier delineators. The type C lights or the top mounted barrier delineators shall be spaced at the number of meters equal to 0.3 times (number of feet equal to) the number of miles per hour in the posted speed limit with a minimum spacing of 6 m (20 ft). Bi-directional lenses will be required on the warning lights when the barrier is adjacent to a lane that is carrying alternating one way traffic. The color of the barrier delineators shall be white when located on the right side of the traffic lane, and yellow when located on the left side of the traffic lane. The color of the barrier delineators shall be white when located adjacent to a lane that is carrying alternating one-way traffic.

Other sections containing specific cross references: None	General Instructions to Field Employees Update Required? Y___ N___ By - Addition or Revision Frequency Manual Update Required? Y____ N____ By – Addition or Revision
Recurring Special Provisions potentially affected: None	Standard Sheets potentially affected: See Above
Motion: Mr. Second: Mr. Ayes: Nays:	Action: Passed as submitted; revised Effective - _____ Letting _____ Supplementals Withdrawn. Resubmit? _____ Received FHWA Approval? ____

Item No. 45-10
Mr. Cales
Date: 2/19/04

DESIGN POLICY CHANGE

This is a design policy change to Design Manual Section 85-5.01(01). The current policy is to pave a drive to the right-of-way line, even if there is no profile grade change for the portion of the drive closest to the right-of-way line. This policy would require temporary right of way for practically all drive constructions.

The proposed change would be to pave the drive only to the tie-in point, such that no temporary right of way is required.

This eliminates the time and costs of acquiring much temporary right of way for drive construction.

Other sections containing specific cross references: None	General Instructions to Field Employees Update Required? Y___ N___ By - Addition or Revision Frequency Manual Update Required? Y____ N____ By – Addition or Revision
Recurring Special Provisions potentially affected: None	Standard Sheets potentially affected: None
Motion: Mr. Second: Mr. Ayes: Nays:	Action: Passed as submitted; revised Effective - _____ Letting _____ Supplementals Withdrawn. Resubmit? _____ Received FHWA Approval? ____

DESIGN MEMORANDUM No. 03-__
POLICY CHANGE

TO: **All Design, Operations, and District Personnel, and Consultants**

FROM: **_____**
Anthony L. Uremovich
Design Policy Engineer
Contracts and Construction Division

SUBJECT: **Temporary Right of Way for Drive Construction**

COMPLEMENTS: ***Indiana Design Manual*** **Section 85-5.01(01)**

EFFECTIVE: **_____, 2003, Letting**

Temporary right of way is not always warranted for driveway construction. If no permanent right of way is required from a property owner, temporary right-of-way takes from that parcel should be avoided. This is in effort to reduce the number of parcels on a project.

Temporary right of way for drive construction should be considered where any of the criteria exist as follows:

1. the proposed grade and/or vertical curve required to construct the drive tie-in extends beyond the permanent right-of-way line. The drive grade should not exceed the vertical tie-in grade shown on the INDOT *Standard Drawing*s;

2. the drive pavement is in need of replacement to the right-of-way line, or a different drive pavement material than that in place must be used;

3. if the proposed drive is wider than the existing drive, it is preferred to place the tapers outside the permanent right of way as shown on the INDOT *Standard Drawings*; or

4. revising the drainage causes grading work outside the permanent right of way.

Temporary right of way for drive construction should not be considered in the situations as follows:

1. Temporary right of way should not be taken where paving is not necessary outside the permanent right of way. The contractor or project engineer will contact the property owner regarding working room at the right-of-way line.

2. Temporary right of way should not be taken if the driveway tie-in is short of the permanent right-of-way line, and the existing pavement beyond the tie-in point may remain in place. Paving should therefore only be to the tie-in point.

3. For a partial 3R project, a 1-m (3-ft) wide HMA wedge is placed adjacent to the mainline or shoulder pavement. Therefore no temporary right of way will be required. See *Indiana Design Manual* Section 56-4.05(02).

Construction limits for drives should be shown on the plans within the temporary right of way. Excessive temporary right of way should not be taken outside of the construction limits. The minimum distance from the construction limits to the temporary right-of-way line is 1.5 m (5 ft). This distance could vary depending on the individual situation. Features such as trees, wells, septic systems, planters, gardens, signs, lamp posts, etc., may appear within the temporary right-of-way limits. If such features are within the temporary right of way and are not to be removed, they should be identified on the plans as not to be disturbed.

[F:\Des\03TRWD-ta.doc]

Item No. 45-11
Mr. Poturalski
Date: 2/19/04

REVISION TO 1999 STANDARD SPECIFICATIONS

SECTION 913, BEGIN LINE 3965, DELETE AND INSERT AS FOLLOWS:

(2) Roadway Loop Wire. Roadway loop wire shall be 14 AWG gauge IMSA ~~51-5~~ *51-7* duct-loop wire with polyvinyl chloride *or polyethylene* outer jacket of 6.3 mm (1/4 in.) diameter.

(3) Sealant. Prior to installing roadway loop wire in the roadway saw cuts, the saw cuts shall be cleaned in accordance with the requirements for the joint sealant to be used. After proper cleaning and installation of the loop wire, the saw cut shall be sealed with a joint sealant material in accordance with 906.02(a)1 or 906.02(a)2. The joint sealant material to be used shall be compatible with the roadway materials. *If polyethylene duct loop wire is used, only sealant in accordance with 906.02(a)1 shall be used.* The joint sealant material shall be installed in accordance with the applicable sealant specification.

Other sections containing specific cross references:	General Instructions to Field Employees Update Required? Y___ N___ By - Addition or Revision Frequency Manual Update Required? Y____ N____ By – Addition or Revision
Recurring Special Provisions potentially affected:	Standard Sheets potentially affected:
Motion: Mr. Second: Mr. Ayes: Nays:	Action: Passed as submitted; revised Effective - _____ Letting _____ Supplementals Withdrawn. Resubmit? _____ Received FHWA Approval? ____

Item No. 45-12
Mr. Poturalksi
Date: 2/19/04

REVISION TO 1999 STANDARD SPECIFICATIONS

SECTION 913, BEGIN LINE 4026, DELETE AS FOLLOWS:

1. Steel Conduit. Steel conduit shall be 50 mm (2 in.) nominal diameter, threaded with a steel coupling on one end meeting applicable requirements for the conduit and the other threaded end protected by a suitable shield. The conduit shall be made of mild steel ~~or intermediate steel. Mild steel conduit shall be in accordance with ANSI C 80.1 and UL 6. Intermediate steel conduit shall be in accordance with UL 1242, ASTM A 513 or ASTM A 135~~. Conduit shall be hot dipped galvanized on the interior and exterior surfaces in accordance with ANSI C 80.1.

Other sections containing specific cross references: None	General Instructions to Field Employees Update Required? Y___ N___ By - Addition or Revision Frequency Manual Update Required? Y____ N____ By – Addition or Revision
Recurring Special Provisions potentially affected: None	Standard Sheets potentially affected: None
Motion: Mr. Second: Mr. Ayes: Nays:	Action: Passed as submitted; revised Effective - _____ Letting _____ Supplementals Withdrawn. Resubmit? _____ Received FHWA Approval? ____